

What is claimed is:

1. A liquid ejection apparatus connected to an external device, comprising:
a liquid ejection head, operable to eject liquid droplets therefrom;
a liquid container, which contains liquid to be supplied to the liquid ejection head;
a timer, which acquires data indicating a current time from the external device,
converts the acquired data into a first value having a data amount smaller than the
acquired data, and performs cyclic clocking in which a first predetermined time period is
repetitively clocked from a predetermined time point;

a nonvolatile storage medium, which stores a second time value indicating a time
at which a maintenance operation is lastly performed, the nonvolatile storage medium
being disposed on the liquid container; and

a determinant, which compares the first value and the second time values to
obtain a third time value, and determines whether a maintenance operation is necessary to
be performed based on the third time value.

2. A liquid ejection apparatus connected to an external device, comprising:
a liquid ejection head, operable to eject liquid droplets therefrom;
a liquid container, which contains liquid to be supplied to the liquid ejection head;
a timer, which acquires a first time value indicating a current time from the
external device, and performs cyclic clocking in which a first predetermined time period
is repetitively clocked from a predetermined time point;

a nonvolatile storage medium, which stores a second time value indicating a time at which a maintenance operation is lastly performed, the nonvolatile storage medium being disposed on the liquid container; and

a determinant, which compares the first and the second time values to obtain a third time value, and determines whether a maintenance operation is necessary to be performed based on the third time value,

wherein the third time value is obtained by subtracting the second time value from the first time value;

wherein the determinant compares the third time value with a fourth time value which is obtained by subtracting a second predetermined time period from the first predetermined time period of the cyclic clocking, when the third time value is not a negative value;

wherein the determinant determines that the time indicated by the first time value is earlier than the time indicated by the second time value, when the third time value is greater than the fourth time value; and

wherein the determinant determines that the third time value is an elapsed time period from the time indicated by the second time value, when the third time value is not greater than the fourth time value.

3. The liquid ejection apparatus as set forth in claim 1, wherein the third time value is obtained by subtracting the second time value from the first time value;

wherein the determinant compares the third time value with a fifth time value which is obtained by adding the third time value to the first predetermined time period of the cyclic clocking, when the third time value is a negative value;

wherein the determinant determines that the time indicated by the first time value is earlier than the time indicated by the second time value, when the third time value is greater than the fifth time value; and

wherein the determinant determines that the third time value is an elapsed time period from the time indicated by the second time value, when the third time value is not greater than the fifth time value.

4. The liquid ejection apparatus as set forth in claim 2, wherein the determinant compares the third time value with a fifth time value which is obtained by adding the third time value to the first predetermined time period of the cyclic clocking, when the third time value is a negative value;

wherein the determinant determines that the time indicated by the first time value is earlier than the time indicated by the second time value, when the third time value is greater than the fifth time value; and

wherein the determinant determines that the third time value is an elapsed time period from the time indicated by the second time value, when the third time value is not greater than the fifth time value.

5. The liquid ejection apparatus as set forth in claim 1, further comprising a power-off time liquid ejection apparatus, which records a sixth time value on the

nonvolatile storage medium, the sixth time value indicating a time at which the liquid ejection apparatus is deactivated,

wherein the timer uses the sixth time value as the predetermined time point, when the liquid ejection apparatus is activated; and

wherein the timer uses the first time value as the predetermined time point, when the timer acquires the first time value after the liquid ejection apparatus is activated.

6. The liquid ejection apparatus as set forth in claim 2, wherein the predetermined time point is zero o'clock of January 1st, and the first predetermined time period is 4 years including a leap year.

7. The liquid ejection apparatus as set forth in claim 6, wherein the second predetermined time period is 24 hours.

8. A liquid container, adapted to be detachably disposed in a liquid ejection apparatus which comprises:

a liquid ejection head, operable to eject liquid droplets therefrom; and

a timer, which acquires data indicating a current time from an external device, converts the acquired data in to a first value having a data amount smaller than the acquired data, and performs cyclic clocking in which a first predetermined time period is repetitively clocked from a predetermined time point, the liquid container comprising:

a container part, which contains liquid to be supplied to the liquid ejection head;
and

a nonvolatile storage medium, operable to store a second value indicating a time at which a maintenance operation is lastly performed,

wherein the second time value is to be compared with the first value to obtain a third time value which is used to determine whether a maintenance operation is necessary to be performed based on the third time value.

9. A liquid container, adapted to be detachably disposed in a liquid ejection apparatus which comprises:

a liquid ejection head, operable to eject liquid droplets therefrom; and

a timer, which acquires a first time value indicating a current time from an external device, and performs cyclic clocking in which a first predetermined time period is repetitively clocked from a predetermined time point, the liquid container comprising:

a container part, which contains liquid to be supplied to the liquid ejection head;

and

a nonvolatile storage medium, operable to store a second value indicating a time at which a maintenance operation is lastly performed, wherein:

the second time value is to be compared with the first time value to obtain a third time value which is used to determine whether a maintenance operation is necessary to be performed based on the third time value;

the third time value is obtained by subtracting the second time value from the first time value;

the third time value is compared with a fourth time value which is obtained by subtracting a second predetermined time period from the first predetermined time period of the cyclic clocking, when the third time value is not a negative value;

it is determined that the time indicated by the first time value is earlier than the time indicated by the second time value, when the third time value is greater than the fourth time value; and

it is determined that the third time value is an elapsed time period from the time indicated by the second time value, when the third time value is not greater than the fourth time value.